



TPAT Science Curriculum

 Scope	Components - content and skills to be taught 
- National Curriculum coverage - Deliberate decisions made about what substantive knowledge is taught when, building from EYFS with key strands identified (Plants, Animals, Materials, Seasonal Changes etc, as identified in the National Curriculum) - Working scientifically skills are mapped out across each year	- Key knowledge is identified through the strands, showing progression from EYFS to Year 6 - Working scientifically skills are mapped out showing progression from EYFS to year 6 - Vocabulary is deliberately mapped out showing progression, building on year on year
Lesson Sequencing	
- Each unit is broken down into individual 5-7 lessons which show how the lessons are sequenced, building on each other - Lessons to either have a Learning Objective (or WALT) or could be answering an enquiry question	- Children will have access to texts which match their ability to support scientists learning and learning about scientists - Science books are focused on showing progression of both substantive knowledge and working scientifically (predictions, measuring, recording data etc), as well as including a range of enquiry skills (comparative testing, research, observation etc)
Retrieval	Enrichment
- Planned and systematic opportunities for prior learning to be retrieval – from previous units of learning - Opportunities for prior learning to be retrieval – from previous lessons, within the lesson design - Use of Socrative used in Y5/6 (at least) for both assessments and retrieval practice	- Education visits and visitors mapped into the curriculum to enhance scientific understanding - Secondary links are established for support in resources and tools, expertise and Y6/7 transition - Science based extracurricular clubs where possible - Involvement in British Science Week - STEM ambassadors - Use of local business to promote STEM subjects/careers
CPD	SEND Adaptations
- Evidence of CPD undertaken by lead - Attendance at TPAT Science Forum - Evidence of CPD provided for staff	- Identify where barriers to learning are in the sequence of learning for specific adaptations for the 4 areas of need - SEND adaptations specifically for science <i>e.g. for children who find organising and carrying out investigations safely challenging</i>
Monitoring	Assessment
- Monitoring schedule in place for science - Monitoring of planning and/or lesson observations shows that the intended curriculum is enacted - There is evidence of children showing knowledge and understanding in books, floor books or on a technology platform - Children can talk about scientists and the discipline of science (working scientifically) - Pupil conferencing shows that children can talk through the learning ensuring that the knowledge matches the end points / knowledge organisers	- Formative assessment through verbal questions throughout the lesson planned in to assess knowledge and understanding - End of unit assessment appropriate to the learning / subject - Assessment strategy in place for science clear to staff and children
Impact	
- The intended science curriculum is enacted and accessible to all children - Children have developed a love of science and can talk with excitement and curiosity - Children's understanding of how science impacts the wider world is enhanced - Children can talk about possible careers in the STEM industry - Children can think like scientists in a logical, ordered and methodical way - Children are knowing more, understanding more and doing more aligned to end points decided on by school	



Truro and Penwith
Academy Trust